

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A card settlement method using a portable electronic device having a fingerprint sensor ~~that connects a portable electronic device having a fingerprint sensor~~ connected to a card company's card management ~~device~~ system via a communication terminal for ~~card settlement of a~~ settling commodity purchase charges or the like[[:]], comprising:

[[An]] confirming the identity ~~confirmation step wherein said~~ of a user by using a portable electronic device having a fingerprint sensor [[reads]] to read the user's fingerprint ~~using~~ said fingerprint sensor and ~~checks it~~ check the reading against pre-registered fingerprint data and ~~thereby confirms~~ to determine whether or not the user is the owner of said portable electronic device having a fingerprint sensor[[:]];

~~A transaction data generation and signature step wherein, when identity if the user is confirmed as the owner of the portable electronic device having a fingerprint sensor, using said portable electronic device having a fingerprint sensor~~ encrypts to encrypt commodity order information and pre-registered card information using a pre-registered transmission public key and ~~generates~~ to generate transaction data, and electronically [[signs]] sign the generated transaction data [[it]] using a pre-registered personal encryption key[[:]];

~~A transmission step wherein~~ transmitting said electronically signed transaction data is sent from ~~the side of~~ said portable electronic device having a fingerprint sensor to said card management ~~device~~ system; [[:]] and

~~A decryption and settlement processing step wherein~~ at said card management ~~device~~ decrypts system, decrypting said electronically signed transaction data using a transmission secret key paired with said transmission public key to obtain said commodity order information and ~~processes the settlement~~ settle purchase charges associated with said commodity order.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{LLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

2. (Currently amended) A card settlement method using a portable electronic device having a fingerprint sensor according to claim 1, wherein

[[Said]] said pre-registered fingerprint data and said pre-registered card information of ~~said portable electronic device having a fingerprint sensor~~ are registered in a state in which they are encrypted by a storage public key provided [[from]] by said card management ~~device-side,~~ system; and

~~The step of~~ said decrypting said electronically signed transaction data [[at]] by said card management ~~device~~ system includes ~~a decryption step that uses~~ using a storage secret key paired with said storage public key.

3. (Currently amended) A card settlement method using a portable electronic device having a fingerprint sensor according to claims 1 or 2, wherein:

said card management ~~device~~ system stores and retains the received [[said]] electronically signed transaction data for a predetermined time period.

4. (Currently amended) A card settlement method using a portable electronic device having a fingerprint sensor according to claim[[s 1,]] 2, [[or 3,]] wherein further comprising:

said card management ~~device~~ includes a step of updating system updating said pre-registered transmission public key and said storage public key ~~registered in said portable electronic device having a fingerprint sensor;~~ and

said portable electronic device having a fingerprint sensor ~~replaces~~ replacing said pre-registered card information and said pre-registered fingerprint data with [[said]] updated pre-registered card information and [[said]] updated pre-registered fingerprint data ~~that was~~ encrypted using said updated storage public key.

5. (Currently amended) A portable electronic device having a fingerprint sensor ~~that~~ connects suitable for connecting to a card company's card management ~~device~~ system via a

communication terminal for ~~[[card]]~~ settlement of a commodity purchase charges or the like~~[[;]]~~, comprising:

- (a) a fingerprint sensor~~[[,]]~~;
- (b) a storage unit~~[[,]]~~;
- (c) an external interface for ~~connection~~ coupling to said communication terminal~~[[,]]~~; and
- (d) a processor for ~~driving and~~ controlling the operation of these units~~[[,]]~~.

Wherein:

(i) said storage unit stores: ~~[[the]]~~ a transmission public key and a storage public key provided ~~[[from]]~~ by said card management ~~device-side system~~, card settlement information ~~for card settlement~~ provided to the owner of the portable electronic device having a fingerprint sensor, master fingerprint data, and a personal encryption key~~[[,]]~~;

wherein said card settlement information and said master fingerprint data are stored in an encrypted state using said storage public key; and

- (ii) said processor comprises:
- (1) a personal encryption key generation means for generating said personal encryption key when said fingerprint sensor reads said master fingerprint data,
 - (2) an identity confirmation means for confirming identity by comparing a fingerprint read by said fingerprint sensor against said master fingerprint data stored in said storage unit, and
 - (3) a transaction data generation and transmission means for encrypting commodity order information and said card settlement information using said transmission public key ~~and generating to secure the~~ transaction data, for electronic signing said

generated transaction data using said personal encryption key, and for sending the electronically signed ~~[[said]]~~ transaction data to said card management ~~device~~ system.

6. (Currently amended) A portable electronic device having a fingerprint sensor, ~~used in card settlement~~, according to claim 5, wherein:

said processor also comprises a master fingerprint data registration means ~~[[so]]~~ that ~~when it receives in response to receiving~~ a registration permission signal from said card management ~~device, it~~ system, reads said master fingerprint data using said fingerprint sensor and registers ~~[[it]]~~ said master fingerprint data, and

said personal encryption key generation means generates said personal encryption key using the read master fingerprint data ~~read when reading said master fingerprint data~~.

7. (Currently amended) A card management ~~device~~ system for ~~performing card settlement of~~ settling commodity purchase charges~~[[, etc.]]~~ or the like based on transaction data received via a communication terminal from a portable electronic device having a fingerprint sensor~~[[,]]~~, comprising:

an encryption key generation means for generating a storage public key and a transmission public key provided to said portable electronic device having a fingerprint sensor~~[[,]]~~;

a registration procedure processing means for requesting identity identification information for determining ~~[[the]]~~ a user when a registration request signal is received from said portable electronic device having a fingerprint sensor, and for sending a registration permission signal to said portable electronic device having a fingerprint sensor when the user is determined based on the received identity identification information~~[[,]]~~;

a decryption means for decrypting said transaction data using a storage secret key paired with said storage public key and a transmission secret key paired with said transmission public

key when [[said]] encrypted and electronically signed transaction data is received from said portable electronic device having a fingerprint sensor[[,]]; and

a settlement processing means for processing settlement based on said decrypted transaction data.

8. (Currently amended) A card settlement system that connects a portable electronic device having a fingerprint sensor to a card company's card management device system via a communication terminal and performs card settlement of commodity purchase charges, ~~etc.;~~ or the like, wherein:

(a) [[Said]] said portable electronic device having a fingerprint sensor comprises:

(i) [[An]] an identity confirmation means ~~wherein the~~ for reading a user's fingerprint ~~is read~~ using said fingerprint sensor and ~~checked~~ comparing said read fingerprint data against pre-registered fingerprint data, ~~thereby confirming to determine~~ whether or not the user is the owner of said portable electronic device having a fingerprint sensor,

(ii) [[A]] a transaction data generation and signature means ~~wherein,~~ when for, after the identity of the user is confirmed, encrypting commodity order information and pre-registered card information ~~are encrypted~~ using a pre-registered transmission public key [[and]] to generate transaction data ~~is generated, and the transaction data is~~ and electronically signed signing said transaction data using a pre-registered personal encryption key, and

(iii) [[A]] a transmission means for sending said electronically signed transaction data to said card management device system; and

(b) [[Said]] said card management device system comprises:

(i) [[A]] a reception means for receiving said electronically signed transaction data,

(ii) ~~[[A]]~~ a decryption means for decrypting said received electronically signed transaction data using a transmission secret key paired with said transmission public key, and

(iii) ~~[[A]]~~ a settlement processing means for processing settlement based on said decrypted transaction data.

9. (Currently amended) A card settlement system that uses a portable electronic device having a fingerprint sensor according to claim ~~[[9]]~~ 8, wherein:

said pre-registered fingerprint data and said pre-registered card information of said portable electronic device having a fingerprint sensor are registered in a state in which they are encrypted by a storage public key provided ~~[[from]]~~ by said card management ~~device-side~~, system; and

said card management ~~device's~~ system's decryption means decrypts using a storage secret key paired with said storage public key.

10. (Currently amended) A card settlement system that uses a portable electronic device having a fingerprint sensor according to claims 8 or 9, wherein:

said card management ~~device~~ system also comprises a storage means for storing and retaining said received transaction data for a predetermined time period.

11. (Currently amended) A card settlement system that uses a portable electronic device having a fingerprint sensor according to ~~claims 8~~, claim 9, ~~[[or 10,]]~~ wherein:

said card management ~~device~~ system also comprises an encryption key update means for updating said transmission public key and said storage public key ~~registered in said portable electronic device having a fingerprint sensor;~~ and

said portable electronic device having a fingerprint sensor comprises a data update means for replacing said pre-registered card information and said pre-registered fingerprint data with

[[said]] updated pre-registered card information and [[said]] updated pre-registered fingerprint data ~~that was~~ encrypted using said updated storage public key.

12. (New) A card settlement system that uses a portable electronic device having a fingerprint sensor according to claim 10, wherein:

said card management system also comprises an encryption key update means for updating said transmission public key and said storage public key; and

said portable electronic device having a fingerprint sensor comprises a data update means for replacing said pre-registered card information and said pre-registered fingerprint data with updated pre-registered card information and updated pre-registered fingerprint data encrypted using said updated storage public key.

13. (New) A card settlement method using a portable electronic device having a fingerprint sensor according to claim 3, further comprising:

said card management system updating said pre-registered transmission public key and said storage public key; and

said portable electronic device having a fingerprint sensor replacing said pre-registered card information and said pre-registered fingerprint data with updated pre-registered card information and updated pre-registered fingerprint data encrypted using said updated storage public key.